Remarks/Arguments:

Applicant previously elected to prosecute Group I (claims 1 - 10), without traverse. With this Amendment, claim 1 has been amended and claims 9 and 10 have been canceled. Therefore, claims 1 - 8 are currently being prosecuted in this application and claims 11 - 22 are withdrawn.

Claims 1 - 10 were rejected under 35 U.S.C. § 112, first paragraph as deemed to contain new matter. Applicant has amended independent claim 1 and believes the current amendment to the claims is sufficient to overcome this rejection. Claim 1 has been amended in order to modify the claim to be similar to originally filed claim 1. No new matter has been added.

Claims 9 and 10 were rejected under 35 U.S.C. § 112, second paragraph, as indefinite. Claims 9 and 10 have been canceled, therefore the rejection is moot. The cancellation of claims 9 and 10 is made without comment as to the propriety of the rejection and solely to expedite prosecution of the pending application. Applicant expressly reserves the right to reinstate and continue prosecution of the subject matter of these claims at a later time.

Claims 1 - 8 stand rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 5,262,375 ("McKedy '375") or U.S. Patent No. 6,248,690 ("McKedy '690") or U.S. Patent No. 6,209,289 ("Cullen"). Claims 9 and 10 stand rejected under 35 U.S.C. § 103(a) as unpatentable over McKedy '375 or McKedy '690 or Cullen in view of one of ordinary skill in the art. Claims 9 and 10 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Cullen in view of McKedy ''375 or McKedy '690. Claims 1 - 10 stand rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 6,133,361 ("Hatakeyama") or U.S. Patent Application Publication 2003/0042166 A1 ("Waterman"), now U.S. Patent No. 6,688,468. It is respectfully submitted that the currently pending claims, as amended, are patentable over the art of record for the reasons set forth below.

Features of Amended Claim 1

Applicant's invention, as recited by amended independent claim 1, includes features which are neither disclosed nor suggested by the art of record, namely:

at least one oxygen reducing agent;

10 - 20 wt% water;

a carrier;

a humectant salt ; and

an electrolyte salt,

said humectant salt and electrolyte salt present in amounts sufficient to reduce the water activity of the composition to below 0.6.

(emphasis added).

Applicant's claimed composition is an oxygen absorbing composition comprising at least one oxygen reducing agent, 10 - 20 wt% water, a carrier, a humectant salt, and an electrolyte salt. The humectant salt and electrolyte salt are present in the composition in sufficient amounts to reduce the water activity of the composition to below 0.6.

The humectant salt and electrolyte salt each play a role in the composition. In particular, the humectant salt, as defined in the specification, "is used to bind moisture within the oxygen absorbing composition such that the water activity of the composition remains relative to the ERH [equilibrium relative humidity] of the environment outside of the package which surrounds the stored product." (Page 7, lines 16 - 19). Thus, the humectant salt allows the oxygen absorbing composition to *retain enough water to support the oxygen scavenging reaction while maintaining a dry environment around the reaction*. Put another way, the humectant is "a substance having hydrophilic properties and a stabilizing effect on the water content in a material, maintaining water content in a narrow range regardless of humidity fluctuations" as one of ordinary skill in the art would recognize. (http://www.google.com/search?hl=en&q=define%3A+humectant). Likewise, the electrolyte salt, when combined with water, is used to activate the oxygen reducing agent. In addition, the carrier is used to carry or stabilize the composition. Thus, each component has properties that are distinct in the composition.

The invention has the advantage of providing a composition to overcome the competing forces of a dry environment, which is necessary for a product to exist, and a moist environment, which is necessary for the oxygen scavenger to absorb oxygen. The interaction between the oxygen reducing agent, the humectant salt, and the electrolyte salt allows the composition to reduce oxygen levels in low humidity environments and to maintain the reduced oxygen levels in these low humidity environments.

Response to Rejections - Cullen, McKedy '375 and McKedy '690

Cullen

With respect to the rejection of claims 1 - 8 based on Cullen, McKedy '375 and McKedy '690, it is Applicant's contention that Cullen cannot anticipate claim 1 because the compositions as taught by Cullen cannot be considered to include a humectant salt in sufficient amounts to achieve the water activity of below 0.6 as claimed by Applicant. It is basic chemistry that the sodium chloride of Cullen's composition in the amount of 2%, if considered to act as the humectant salt, would not be sufficient to achieve a water activity of 0.6, even if the 2% sodium chloride was totally saturated. Likewise, the sodium bicarbonate, as taught by Cullen, could not be considered to be the humectant salt because in Cullen the sodium bicarbonate reacts with the fumaric acid to produce carbon dioxide gas. (col. 3, lines 37-43). Applicant also notes that sodium bicarbonate is soluble in water and could not act as a humectant, defined above, as Applicant has claimed.

Further, Cullen does not teach, disclose or suggest that either the 2% sodium chloride or the sodium bicarbonate would even act as a humectant. Applicant also contends that if the silica gel were to be considered the humectant salt, the specific limitation of including a carrier then could not be met, as Applicant has claimed that the composition requires a carrier and a humectant salt, among other constituents. Most importantly, the humectant salt and electrolyte salt must both be present *in an amount to reduce the water activity of the composition to below 0.6*. Therefore, Applicant contends that Cullen cannot be considered to teach each and every element of the claims and therefore, Cullen cannot anticipate Applicant's claim 1. It is also Applicant's position that there is nothing in Cullen that teaches or suggests the invention currently claimed, either alone or in combination with any known reference.

Therefore, Applicant contends that independent claim 1 is patentable over Cullen. Claims 2 - 8 are also patentable over Cullen at least for the same reasons that claim 1, on which they are dependent, is patentable, but may be separately patentable for additional reasons as well.

McKedy '375 and '690

With respect to McKedy '375 and '690, Applicant contends that neither reference can anticipate the claims as neither reference teaches each and every element of the claimed invention. Notwithstanding that the claims require that there be present amounts of the humectant salt and electrolyte salt sufficient to reduce the water activity to less than 0.6, both references fail to teach or suggest an electrolyte salt, a humectant salt and a carrier, among other constituents. As the Office Action argues, McKedy '375 teaches "a salt such as sodium chloride **(reads on applicant's electrolyte salt or humectant)** . . . and optionally a water-attracting and supplying component such as silica gel **(reads on applicant's claimed carrier component and applicant's claimed humectant salt solution)** . . . . (Office Action, page 8). Further, the Office Action argues that McKedy '690 teaches "a salt such as sodium chloride **(reads on applicant's electrolyte salt or humectant)** . . . and a water-attracting and supplying component such as silica gel **(reads on applicant's claimed carrier component and applicant's claimed humectant salt solution)** or activated carbon with liquid water therein . . . . (Office Action, page 8).

Applicant contends, however, that with regard to both McKedy references, the Office Action's characterization that the sodium chloride reads on Applicant's electrolyte or humectant salt and the silica gel reads on Applicant's carrier and humectant salt cannot be construed to anticipate Applicant's claimed invention, where Applicant's claimed invention requires separate, distinct components that each have separate properties and functions, as those of ordinary skill in the art would recognize. Applicant contends that McKedy's sodium chloride in such concentrations as used in the examples would necessarily act as an electrolyte in the composition. If this were the case, then the silica gel would have to act either as the humectant or the carrier, but not both because the claims require that there be both a humectant salt and a carrier. It is apparent that the Office Action fails to appreciate that, as claimed, the silica gel could not act as both the carrier and the humectant salt because the silica gel in the composition as claimed could not perform both the function of a carrier and the humectant salt because of the interaction of each of the constituents of the composition. As noted above, the humectant maintains the water content in the composition regardless of humidity fluctuations, both retaining enough water to support the oxygen scavenging reaction while maintaining a dry environment around the reaction. There is no teaching, disclosure or suggestion of such a component in either of the McKedy patents. Therefore, Applicant contends that neither of the McKedy patents can be considered to anticipate Applicant's claims 1 - 8 because each and every element of Applicant's claims is not met.

Further, with respect to the obviousness rejections based on Cullen, McKedy '375 and McKedy '690, Applicant asserts that the Office Action has relied upon improper hindsight and improperly relies upon the level of skill in the art to provide the motivation supply produce Applicant's invention. As stated in the M.P.E.P § 2143.01:

> "There are three possible sources for a motivation to combine references: the nature of the problem to be solved, the teachings of the prior art, and the knowledge of persons of ordinary skill in the art." *In re Rouffet*, 149 F.3d 1350, 1357, 47 U.S.P.Q.2d 1453, 1457-58 (Fed. Cir. 1998)(The combination of the references taught every element of the claimed invention, however, without a motivation to combine, a rejection based on a *prima facie* case of obviousness was held improper.) ***The level of skill in the art cannot be relied upon to provide the suggestion to combine references.*** *Al-Site Corp. v. VSI Int'l Inc.*, 174 F.3d 1308, 50 U.S.P.Q.2d 1161 (Fed. Cir. 1999)(emphasis added).

Nowhere does either of the McKedy references teach, disclose or suggest a composition containing all of the elements of Applicant's claimed composition, as the Office Action admits at page 8, much less one having a humectant salt and an electrolyte salt in sufficient amounts to reduce the water activity of the composition to less than 0.6. Therefore, the Office Action relies on one of ordinary skill in the art to supply the missing components. As noted above, each of the components of Applicant's claimed composition would be recognizable as separate, distinct components that perform different functions to one of ordinary skill in the art. Without the benefit of Applicant's disclosed invention, one of ordinary skill in the art would not be motivated to use a carrier, an electrolyte salt and a humectant salt in combination, among other components, to achieve a water activity to below 0.6. In addition, notwithstanding the water activity limitation, there is simply no teaching, disclosure or suggestion in McKedy to motivate one of ordinary skill in the art to do add a humectant salt to maintain a dry environment while allowing oxygen absorption to be maintained. Nothing in the McKedy patents suggest this problem or consider a solution to this problem. It is therefore improper for the Office Action to provide the motivation for an obviousness rejection based solely on the level of skill in the art where the reference does not provide any motivation otherwise. Therefore, Applicant contends that the Office Action has failed to make a *prima facie* case of obviousness with respect to the McKedy references for at least this reason.

Response to Prior Art Rejections - Cullen, McKedy '375 and McKedy '690

With respect to the rejection of claims 9 and 10 based on McKedy '375 or McKedy '690 in view of one of ordinary skill in the art and the rejection of claims 9 and 10 based on Cullen in view of McKedy '375 or McKedy '690, Applicant notes that with the cancellation of claims 9 and 10, these rejections are rendered moot.

Response to Obviousness Rejection - Hatakeyama and Waterman

The Office Action rejects claims 1 - 8 as obvious over Hatakeyama or Waterman in view of one of ordinary skill in the art. As to the Office Action's reliance on Waterman and Hatakeyama, Applicant contends that the Office Action has failed to make a *prima facie* case of obviousness for at least the reasons set forth below.

Applicant notes initially that the Office Action reasserts the same rejection as made in the previous Office Action and provides no indication in the Response to Arguments section of the Office Action as to why the rejection is maintained. Applicant reasserts that for the reasons set forth in the previous Office Action, the rejection of claims 1 - 8 based on Hatakeyama or Waterman in view of one of ordinary skill in the art cannot be maintained.

As noted above, it is impermissible to use the level of skill in the art to provide the suggestion to use the reference to produce Applicant's invention. The Office Action admits that "there is no direct teaching (*i.e.*, by way of example) to an oxygen absorbing composition that actually comprises a carrier material such as a water-absorbing/releasing material." (Office Action of July 8, 2005, page 12). However, the Office Action asserts that "it would have been obvious to one having ordinary skill in the art to use the disclosure of either reference as strong motivation to actually incorporate a water absorbing/releasing carrier material into the oxygen absorbing compositions taught by each patent since such addition is strongly suggested by the disclosure of each reference." *Id.* Yet in its previous Office Action response, Applicant specifically requested the Patent Office to point out this strong suggestion in order to support its purported *prima facie* case of obviousness. Applicant points out that the Patent Office has not addressed this issue and contends this is because there is no such strong suggestion in the disclosure of either reference. The Office Action merely relies upon a purported level of skill in the art to support its argument, which is improper under M.P.E.P. § 2143.01, without some teaching in the reference itself. In this it is clear that the Office Action impermissibly relies on hindsight gleaned from the current disclosure to attempt to produce Applicant's claimed invention. Therefore, the rejections cannot stand.

Applicant further notes that in the Summary of the Invention section of the Hatakeyama reference, Hatakeyama discloses that "Moreover, in respect to dry items having a water activity (a_w) of 0.7 or less, especially 0.6 or less, while oxygen may not be absorbed by applying conventional moisture-dependent oxygen absorbers unless water is supplied, the present invention is capable of implementing oxygen absorption for an item having a water activity of 0.7, or less without any water being supplied." Therefore, Applicant contends that Hatakeyama teaches away from Applicant's invention in that the oxygen absorber of Hatakeyama does not include water as a component of its composition. Nor does Hatakeyama teach, disclose or suggest a humectant salt because the oxygen absorption of Hatakeyama is carried out without water to activate or maintain oxygen absorption. Therefore, Applicant contends that one of ordinary skill in the art would not be motivated to include a water absorbing/releasing material into the oxygen absorbing composition taught by Hatakeyama because in Hatakeyama the oxygen absorbing composition is capable of implementing oxygen absorption without any water being supplied, unlike conventional moisture-dependent oxygen absorbers. Thus, the Office Action has failed make a *prima facie* case of obviousness with respect to Hatakeyama in view of one of ordinary skill in the art.

With respect to the Watermann reference, Applicant asserts that although the Office Action admits that "there is no direct teaching . . . to an oxygen absorbing composition that actually comprises a carrier material such as a water absorbing/releasing material," (Office Action of July 8, 2005, Page 12) the Office Action fails to note where the Watermann reference discloses the use of a humectant salt in addition to the use of a carrier, along with an electrolyte salt in which the electrolyte salt and humectant salt are present in amounts sufficient to reduce the water activity of the composition to below 0.6 (as claimed in the present application). As noted above, the humectant salt in the present invention is present to allow the oxygen absorbing composition to retain enough water to support the oxygen scavenging reaction while maintaining a dry environment otherwise. Nowhere is a constituent taught, disclosed or suggested in Watermann that performs each of these functions, much less a composition having amounts of humectant and electrolyte salts that have a water activity be less than 0.6. Once again, Applicant contends that only through impermissible hindsight is the Office Action able to state a *prima facie* case of obviousness argument. Therefore, Applicant submits that the rejections based on Hatakeyama and Watermann are improper.

Conclusion

Applicant contends, for at least the reasons set forth above, that claim 1 is clearly patentable over the references of record. Claims 2 - 8 are also patentable at least for the same reasons that claim 1, on which they are dependent, is patentable, but may be separately patentable for additional reasons as well.

In view of the amendments and arguments set forth above, Applicant contends that claims 1 - 8 are in condition for allowance. An interview with the Examiner in charge of this application is requested to discuss any remaining issues which might preclude a Notice of Allowance.

Respectfully submitted,

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Debra L. Kelly

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